

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method ~~Method~~ for access control in a multicast system when distributing data from a source (~~VS~~) on a common link (~~L3~~) to at least two users (~~U1-U12~~) via a node, comprising the following steps: (BN21), ~~characterized by the following steps:~~

assigning a weight to each user(~~U1-U12~~) associated with the node (~~BN21~~), ~~which wherein the weights of each user determine each user's allowed bandwidth, i.e. bandwidth allowed to use out of available bandwidth on the common link (L3);~~

receiving to the node (~~BN21~~), a request to join a multicast session(~~S81~~), from a first user (U1); and

comparing, in the node (~~BN21~~), actual bandwidth usage by the first user (U1) with the first user's allowed bandwidth, wherein the actual bandwidth usage is calculated as the sum of the first user's allowed bandwidth portion part of each used session on the common link (L3) including and the actual bandwidth usage by the first user the new request, with the users (U1) allowed bandwidth.

2. (Currently Amended) The method for access control in a multicast system according to claim 1, further comprising: comprising the following further step:

~~deny~~ denying the request if the first user's allowed bandwidth is lower than the actual bandwidth.

3. (Currently Amended) The method for access control in a multicast system according to claim 1, further comprising the following ~~further~~ steps:

~~finding out~~ determining that the requested multicast session (~~S₈₁~~) is used by at least one other user (~~U8, U12~~); and

allowing the request from the first user, U1.

4. (Currently Amended) The method for access control in a multicast system according to claim 1, further comprising the following ~~further~~ steps:
~~perceiving~~ determining that the first user (U1) used the session (S_{gt}) less than a predefined period of time ~~qualification time~~ ~~age~~;
changing, temporarily, the first user's weight; and
allowing the request if the allowed bandwidth is higher than the actual bandwidth.

5. (Currently Amended) The method for access control in a multicast system according to claim 4, comprising ~~before changing the user's weight~~, the following ~~further~~ step:
~~perceiving~~ prior to changing the first user's weight, determining that the first user used the session (S_{gt}) ~~during a time period~~ for a period of time that exceeds a predetermined guarantee time.

6. (Currently Amended) The method for access control in a multicast system according to claim 4 ~~or 5~~, comprising the following further steps:
the first user leaving (U1) ~~leaves~~ the requested session S_{gt} ; and
changing ~~back~~ the first user's weight to the weight's ~~it's~~ original value.

7. (Currently Amended) An arrangement ~~Arrangement~~ for access control in a multicast system when distributing data from a source (VS) on a common link (L3) to at least two users (U1-U12) via a node (BN21), the arrangement comprising: ~~which arrangement is characterized by:~~
means for assigning a weight to each user (U1-U12) associated with the node (BN21), ~~which weights determine~~ the weights determining each user's allowed bandwidth; ~~i. e. bandwidth allowed to use out of available bandwidth on the common link (L3);~~
means in the node (BN21) for receiving a request to join a multicast session (S_{gt}), from a first user (U1) ;

means for comparing₁ in the node (~~BN21~~), actual bandwidth usage by the first user (U1) to the first user's allowed bandwidth, wherein the first user's actual bandwidth usage is calculated as the sum of the first user's allowed bandwidth portion part of each used session on the common link and the actual bandwidth usage by the first user (L3) ~~including the new request, with the users(U1) allowed bandwidth.~~

8. (Currently Amended) The arrangement ~~Arrangement~~ for access control in a multicast system according to claim 7, comprising means for denying the request if the first user's allowed bandwidth is lower than the actual bandwidth.

9. (Currently Amended) The arrangement ~~Arrangement~~ for access control in a multicast system according to claim 7, comprising:

- means for determining ~~finding out~~ that the requested session (S_{gt}) is used by at least one other user (~~U8, U12~~); and
- means for allowing the request from the first user ~~U4~~.

10. (Currently Amended) The arrangement ~~Arrangement~~ for access control in a multicast system according to claim 7, comprising:

- means for determining ~~perceiving~~ that the user (~~U1~~) used the session (S_{gt}) less than a predefined period of time ~~qualification time ago~~;
- means for ~~changing~~ temporarily changing the first user's weight;
- means for allowing the request if the first user's allowed bandwidth is higher than the actual bandwidth.

11. (Currently Amended) The arrangement ~~Arrangement~~ for access control in a multicast system according to claim 10, comprising:

- means for determining ~~perceiving~~ that the first user used the session (S_{gt}) during a time period that exceeds a predetermined guaranteed time period ~~guarantee time~~.

12. (Currently Amended) ~~The arrangement~~ Arrangement for access control in a multicast system according to claim 10 ~~or 14~~, further comprising means for changing ~~back~~ the first user's weight to the weight's ~~it's~~ original value.

13. (Currently Amended) ~~The arrangement~~ Arrangement for access control in a multicast system according to claim 7, ~~further any of the claims 7-12~~ comprising means for calculating the first user's ~~(U1)~~ actual bandwidth.

14. (Currently Amended) ~~The arrangement~~ Arrangement for access control in a multicast system according to claim 7 ~~further any of the claims 7-13~~ comprising means for calculating the first user's ~~(U1)~~ allowed bandwidth.